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20280 7590 07/11/2011
MOTOROLA MOBILITY, INC
600 NORTH US HIGHWAY 45
W2-55BB
LIBERTYVILLE, IL 60048-5343

EXAMINER
GONZALES, APRIL GUZMAN

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 07/11/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,513	10/28/2003	Robert T. Love	CE10354R	5389

TITLE OF INVENTION: METHOD AND APPARATUS FOR PROVIDING A DISTRIBUTED ARCHITECTURE DIGITAL WIRELESS COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	10/11/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20280 7590 07/11/2011
MOTOROLA MOBILITY, INC
600 NORTH US HIGHWAY 45
W2-55BB
LIBERTYVILLE, IL 60048-5343

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,513	10/28/2003	Robert T. Love	CE10354R	5389

TITLE OF INVENTION: METHOD AND APPARATUS FOR PROVIDING A DISTRIBUTED ARCHITECTURE DIGITAL WIRELESS COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	10/11/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
GONZALES, APRIL GUZMAN	2618	455-067110

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER	
GONZALES, APRIL GUZMAN	
ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 07/11/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 95 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 95 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No.	Applicant(s)	
	10/695,513	LOVE ET AL.	
	Examiner	Art Unit	
	APRIL G. GONZALES	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *04/06/2011*.

2. ☒ The allowed claim(s) is/are *1, 3-9, 11-12, 14-21, 23-28, 41, 46-48, 50, 58-74*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/APRIL G GONZALES/ Examiner, Art Unit 2618	/Temesghen Ghebretinsae/ Supervisory Patent Examiner, Art Unit 2618

DETAILED ACTION

Response to Amendment

The Examiner acknowledges the receipt of the Applicant's amendment filed on 04/06/2011. Claims 1, 23-24, 41, 58 and 59 have been amended. Claims 2, 10, 13, 22, 29-40, 42-45, 49, and 51-57 have been canceled. Claims 64-74 have been added. **Claims 1, 3-9, 11-12, 14-21, 23-28, 41, 46-48, 50, and 58-74** are therefore currently pending in the present application.

Response to Arguments

Claim 1 has been amended to include the features of 'objected to' claim 57. Therefore, claim 1 and its depending claims are now in condition for allowance.

Claim 41 has been amended to include the features of 'objected to' claim 43 and at least portions of intervening claim 42. Therefore, claim 41 is in condition for allowance.

Claim 59 has been amended to include the features of corresponding independent claim 1 and a portion of intervening claim 58. Therefore, claim 59 is in condition for allowance.

Claims 11-12, 14-21, 23-34, 36-40, 46-48, 50 and 60-63 have been previously allowed.

Allowable Subject Matter

Claims 1, 3-9, 11-12, 14-21, 23-28, 41, 46-48, 50, and 58-74 are allowed.

The following is an examiner's statement of reasons for allowance:

Consider claim 1, the best prior art of record found during the examination of the present application, Luschi et al. (U.S. Patent Application Publication # 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for scheduling mobile station

uplink transmissions by a base station comprising steps of: receiving scheduling information from a mobile station, wherein the scheduling information comprises at least one of a queue status and a power status of the mobile station; determining an uplink channel scheduling assignment for the mobile station using at least one of the scheduling information and a base station interference metric and a link quality corresponding to the mobile station; transmitting the uplink channel scheduling assignment to the mobile station, wherein the uplink channel scheduling assignment comprises a maximum traffic channel to control channel power ratio that the mobile station is allowed to use in a subsequent reverse link transmission; selecting, by the mobile station, transport format and resource-related information (TFRI) for an uplink transmission, wherein the selection is based on the maximum traffic channel to control channel power ratio; and receiving, from the mobile station, an indication of the selected TFRI for an uplink transmission.

Luschi teaches a random access channel communicating quality of service and amount of data to be transmitted, A HS-USCH uplink shared channel scheduler resides at the network, base station, side which requires the uplink signaling of the UE's current buffer status and the UE must then also transmit H-ARQ parameters and current buffer status ([0047]). Furthermore, scheduling of the different users on the downlink shared channel is performed on the basis of the channel conditions and the UE negotiated Quality of Service ([0046]). Therefore claim 1 is considered novel and non-obvious over the prior art and therefore is allowed.

Claims 3-9, and 58 depend upon allowable claim 1, therefore, claims 3-9, and 58 are also allowed for the same reasons explained above in view of Luschi.

Consider claim 11, the best prior art of record found during the examination of the present application, Kadaba et al. (U.S. Patent # 7,158,504), fail to specifically teach, suggest, or disclose a method for scheduling a mobile station transmission comprising: scheduling, by a base station of a plurality of base stations, a mobile station of a plurality of mobile stations for a transmission interval based on scheduling information received from each mobile station of the plurality of mobile stations and further based on a link quality metric; conveying base station interference information to the selected mobile station via a forward link control channel; receiving, by the base station from the scheduled mobile station, a first transmission of data, which transmission of data is conveyed by the mobile station during the transmission interval and comprises transport format and resource-related information (TFRI); decoding the first transmission of the data; when the first transmission of the data is not successfully decoded, receiving, by the base station, communications from the scheduled mobile station corresponding to at least one retransmission of the data; combining, by the base station, each of the at least one retransmission of the data with the previously received data to produce combined data until the first to occur of a successful decoding of the combined data or a flushing of a Hybrid Automatic Repeat Request (H-ARQ) buffer; when one of the first transmission of data and the combined data is successfully decoded, conveying an acknowledgment to the mobile station; and in response to conveying the acknowledgment, flushing the H-ARQ buffer.

Kadaba teaches the wireless unit 150 deems the transmission successful if either base station 152 or 154 ACKs. The wireless unit 150 sends the R-EPFICH and the R-HHCH to flush out the buffer of the base station that was unsuccessful in decoding the previous transmission (column 12 lines 1-13). BS1 is successful in decoding the wireless unit's data burst and sends

ACK indicated by arrow 184. BS2 is unsuccessful in decoding the wireless unit's data burst and sends a NACK indicated by arrow 186. The wireless unit 170 acts on the basis of the ACK from BS1. The next transmission of the wireless unit can be scheduled by either BS1 or BS2. The wireless unit 170 sends the R-EPFICH and R-HCCH to flush out BS2's buffer during this transmission as indicated by arrows 188 and 190 (column 12 lines 32-42). Therefore claim 11 is considered novel and non-obvious over the prior art and therefore is allowed.

Claims 12, 14-21, 23-28 depend on allowable claim 11, therefore these claims are also considered novel and non-obvious over the prior art and are therefore allowed.

Consider claim 41, the best prior art of record found during the examination of the present application, Kadaba et al. (U.S. Patent # 7,158,504), fail to specifically teach, suggest, or disclose a method for controlling communications with a mobile station by a base station comprising steps of: storing, by the base station, traffic data from the mobile station in a traffic data buffer; determining a reverse link signal quality metric at the base station, wherein the reverse link signal quality metric comprises a reverse link power control metric; comparing the reverse link power control metric to an inner loop power control setpoint; and when a ratio of the reverse link power control metric to the inner loop power control setpoint exceeds a threshold, flushing the traffic data buffer.

Kadaba teaches as the reverse request update channel reports the current status of the wireless unit's buffer, it alerts the base station to the wireless unit's presence, and triggers subsequent scheduling of the wireless unit by base stations that receive this channel from the wireless unit (column 4 lines 56-67, and column 5 lines 1-17). Reverse pilot reference channel reports the wireless unit pilot strength to the base station to enable the base station to calculate

the instantaneous path loss to the wireless unit and hence the ability of the mobile to support different data rates (column 5 lines 18-51). Furthermore, Kadaba teaches to flush out the buffer of the base station that was unsuccessful in decoding the previous transmission (column 12 lines 14-67, and column 13 lines 1-7). These teachings differ from the claimed invention therefore, claim 41 is considered novel and non-obvious over the prior art and therefore is allowed.

Consider claim 46, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for controlling communications with a mobile station by a base station comprising steps of: determining, by the base station, a link quality metric at the base station; comparing, by the base station, the link quality metric to a threshold; and when the link quality metric compares unfavorably with the threshold, deallocating, by the base station, demodulation resources allocated to a first uplink control channel associated with the mobile station while maintaining allocation of demodulation resources associated with a second uplink control channel that is associated with the mobile station, wherein each of the demodulation resources allocated to a first uplink control channel and the demodulation resources associated with a second uplink control channel demodulation resource comprises a RAKE finger.

Luschi teaches the operation of network-initiated downlink packet transmission is similar to known HSDPA schemes using fast rate selection by Adaptive Modulation and Coding (AMC), and H-ARQ at the MAC layer ([0045]). To enable fast rate selection by AMC, UEs must explicitly report and estimate of the downlink channel quality or the downlink supportable rate ([0054]). For both the uplink and the downlink shared channels, the network determines the required rate of transmission of the feedback measurement report, and communicates this

information to the UE ([0055]). Therefore claim 46 is considered novel and non-obvious over the prior art and therefore is allowed.

Claims 47-48 depend upon allowable claim 46, therefore these claims are also considered novel and non-obvious over the prior art and therefore are also allowed.

Consider claim 50, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for controlling communications with a mobile station by a base station comprising steps of: transmitting, by the base station, first control data to the mobile station on a downlink control channel; upon transmitting the first control data, starting, by the base station, a timer; and when a predetermined period of time expires prior to receiving second control data from the mobile station on an uplink control channel, deallocating, by the base station, demodulation resources allocated to a first uplink control channel associated with the mobile station while maintaining allocation of demodulation resources associated with a second uplink control channel that is associated with the mobile station, wherein each of the demodulation resources allocated to a first uplink control channel and the demodulation resources associated with a second uplink control channel demodulation resource comprises a RAKE finger.

Luschi teaches the operation of network-initiated downlink packet transmission is similar to known HSDPA schemes using fast rate selection by Adaptive Modulation and Coding (AMC), and H-ARQ at the MAC layer ([0045]). To enable fast rate selection by AMC, UEs must explicitly report and estimate of the downlink channel quality or the downlink supportable rate ([0054]). For both the uplink and the downlink shared channels, the network determines the

required rate of transmission of the feedback measurement report, and communicates this information to the UE ([0055]). Therefore claim 50 is considered novel and non-obvious over the prior art and therefore is allowed.

Consider claim 59, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for scheduling mobile station uplink transmissions by a base station comprising steps of: receiving scheduling information from a mobile station, wherein the scheduling information comprises at least one of a queue status and a power status of the mobile station; determining an uplink channel scheduling assignment for the mobile station using at least one of the scheduling information and a base station interference metric and a link quality corresponding to the selected mobile station; transmitting the uplink channel scheduling assignment to the mobile station, wherein the uplink channel scheduling assignment comprises a maximum traffic channel to control channel power ratio that the mobile station is allowed to use in a subsequent reverse link transmission; and receiving, from the mobile station, a transmission of data, which transmission of data is conveyed by the mobile station during a transmission interval and comprises transport format and resource-related information (TFRI); wherein the scheduling information is received via a first reverse link control channel and the transport format and resource-related information (TFRI) is received via a second reverse link control channel.

Luschi teaches a random access channel communicating quality of service and amount of data to be transmitted, A HS-USCH uplink shared channel scheduler resides at the network, base station, side which requires the uplink signaling of the UE's current buffer status and the UE

must then also transmit H-ARQ parameters and current buffer status ([0047]). Furthermore, scheduling of the different users on the downlink shared channel is performed on the basis of the channel conditions and the UE negotiated Quality of Service ([0046]). Therefore claim 59 is considered novel and non-obvious over the prior art and therefore is allowed.

Consider claim 60, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for scheduling a mobile station uplink transmission comprising steps of: transmitting scheduling information by the mobile station, wherein the scheduling information comprises at least one of a queue status and a power status of the mobile station; receiving, by the mobile station from a base station, an uplink channel scheduling assignment, wherein the uplink channel scheduling assignment comprises a maximum power margin target; selecting, by the mobile station and based on the maximum power margin target, a modulation and coding scheme for an uplink transmission; and transmitting, by the mobile station, an indication of the selected modulation and coding scheme.

Luschi teaches the operation of network-initiated downlink packet transmission is similar to known HSDPA schemes using fast rate selection by Adaptive Modulation and Coding (AMC), and H-ARQ at the MAC layer ([0045]). To enable fast rate selection by AMC, UEs must explicitly report and estimate of the downlink channel quality or the downlink supportable rate ([0054]). For both the uplink and the downlink shared channels, the network determines the required rate of transmission of the feedback measurement report, and communicates this information to the UE ([0055]). Therefore claim 60 is considered novel and non-obvious over the prior art and therefore is allowed.

Claim 61 depends upon allowable claim 60, therefore, claim 61 is also considered novel and non-obvious over the prior art and therefore is also allowed.

Consider claim 62, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a mobile station comprising: means for transmitting scheduling information, wherein the scheduling information comprises at least one of a queue status and a power status of the mobile station; means for receiving, from a base station, an uplink channel scheduling assignment that is based on the scheduling information, wherein the uplink channel scheduling assignment comprises a maximum traffic channel to control channel power ratio; means for selecting a modulation and coding scheme based on the maximum traffic channel to control channel power ratio and for an uplink transmission; and means for transmitting an indication of the selected modulation and coding scheme to the base station.

Luschi teaches the operation of network-initiated downlink packet transmission is similar to known HSDPA schemes using fast rate selection by Adaptive Modulation and Coding (AMC), and H-ARQ at the MAC layer ([0045]). To enable fast rate selection by AMC, UEs must explicitly report and estimate of the downlink channel quality or the downlink supportable rate ([0054]). For both the uplink and the downlink shared channels, the network determines the required rate of transmission of the feedback measurement report, and communicates this information to the UE ([0055]). Therefore claim 62 is considered novel and non-obvious over the prior art and therefore is allowed.

Claim 63 depends upon allowable claim 62, therefore, claim 63 is considered novel and non-obvious over the prior art and therefore is also allowed.

Consider claim 64, the best prior art of record found during the examination of the present application, Luschi et al. (US 2003/0045288 A1 herein Luschi), fail to specifically teach, suggest, or disclose a method for transmitting data by a mobile station comprising steps of: receiving, at the mobile station, interference information associated with, and conveyed to the mobile station by, a base station; selecting, by the mobile station, a modulation and coding scheme based on the received interference information; transmitting data in a first reverse link channel; and transmitting an indication of the selected modulation and coding scheme in a second reverse link channel, wherein the selected modulation and coding scheme can be used to demodulate and decode the transmitted data.

Luschi teaches the operation of network-initiated downlink packet transmission is similar to known HSDPA schemes using fast rate selection by Adaptive Modulation and Coding (AMC), and H-ARQ at the MAC layer ([0045]). To enable fast rate selection by AMC, UEs must explicitly report and estimate of the downlink channel quality or the downlink supportable rate ([0054]). For both the uplink and the downlink shared channels, the network determines the required rate of transmission of the feedback measurement report, and communicates this information to the UE ([0055]). Therefore claim 62 is considered novel and non-obvious over the prior art and therefore is allowed.

Claims 65-74 depend upon allowable claim 64, therefore, claims 65-74 are considered novel and non-obvious over the prior art and therefore are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: see PTO-892 Notice of References Cited.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
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Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

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Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April G. Gonzales whose telephone number is 571-270-1101 and whose fax number is 571-270-2101. The examiner can normally be reached on Monday - Friday, 10:00 a.m. - 6:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Temesghen Ghebretinsae can be reached on 571-272-3017. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. If you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/April Guzman Gonzales/
/A. G. G./
Examiner, Art Unit 2618

/Temesghen Ghebretinsae/
Supervisory Patent Examiner, Art Unit 2618
6/17/2011